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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,610	09/25/2003	Nathan P. Miserocchi	03SW001	6786

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EXAMINER	
NGUYEN, HAU H	
ART UNIT	PAPER NUMBER
2628	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/670,610	MISEROCCHI, NATHAN P.	
	Examiner	Art Unit	
	Hau H. Nguyen	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06/14/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 14 is objected to because of the following informalities: the second *susset* should read "the second subset". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 31 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 31 (from lines 16-20) claims the limitations "the first plurality", and "the second plurality", which are indefinite because the examiner would not recognize which "*plurality*" Applicant are referring to (either "the plurality of graphical entities" or "the plurality of components"). Correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Silva et al. (U.S. Patent No. 6,061,067).

Referring to claim 1, Silva et al. teach a system for managing graphical information (Fig. 1), the system comprising:

a processing device (110); and

a first memory portion (modifier stack 199, Fig. 1, or 280, Fig. 2) within at least one memory device (memory 140) that is coupled to the processing device, wherein the first memory portion stores

a first plurality of files having a first type of information (210, 220, Fig. 2) relating to graphical entities, and

a second plurality of files having a second type of information (230, 240, Fig. 2) relating to graphical entities, wherein each of the second plurality of files references at least one of the first plurality of files (col. 10, line 59 to col. 11, line 2, and col. 6, lines 39-51); and

a second memory portion within the at least one memory device, wherein the second memory portion duplicatively stores a first subset of the first plurality of files and a second subset of the second plurality of files (a cache to store the derived object 270, col. 10, lines 10-19, and Figs. 13 and 14),

wherein each of the files of the first subset are referenced by at least one of the files of the second subset (col. 6, lines 13-29), and

wherein the first and second subsets have information relating to a first project (project for a tube object 300 as shown in Fig. 3).

As per claim 2, Silva et al. teach the at least a first portion of the first type of information relating to graphical entities relates to fundamental graphical information (base object, col. 6, lines 30-37).

As per claim 3, Silva et al. teach the first type of information relating to graphical entities concerns models (such as modeling the tube as shown in Fig. 3).

As per claim 4, Silva et al. further teach the first portion of the first type of information includes information selected from the group consisting of primitive information, vertice information, face information, native color information, and native pivot information (col. 11, lines 3-24).

As per claims 5 and 6, Silva et al. also teach each of the first plurality of files includes a numeric value, and each numeric value of each of the first plurality of files is different from each of the other numeric values of the others of the first plurality of files, and each of the first plurality of files includes a name (Fig. 3, under box "Name and Color").

As per claim 7, Silva et al. further teach at least a first portion of the second type of information relating to graphical entities relates to secondary graphical characteristics (such as bending or twisting, etc., Figs. 4 and 5).

As per claim 8, Silva et al. also teach the second type of information relating to graphical entities concerns objects and object assemblies (such as assembling the tube 300 shown in Figs. 4-6).

As per claim 9, Silva et al. teach the first portion of the second type of information includes information selected from the group consisting of special color information, position

information, scale information, orientation information, pivot offset information, and animation path information (col. 7, lines 3-13).

As per claim 10, as cited above, Silva et al. further teach each of the second plurality of files includes at least one reference by which the respective file refers to model information within one of the first plurality of files (col. 6, lines 13-29, and lines 39-51).

As per claim 11, as cited above, Silva et al. teach each of the second plurality of files includes a numeric value, and each numeric value of each of the second plurality of files is different from each of the other numeric values of the others of the second plurality of files (Fig. 3, under box "Name and Color").

As per claim 12, Silva et al. further teach a third memory portion within the at least one memory device, wherein the third memory portion stores a third plurality of files, wherein each of the third plurality of files is related to a respective one of second subset (190-194, Fig. 1) of the second plurality of files (210-240, Fig. 2) (scene memory 142, Fig. 1).

As per claim 13, Silva et al. also teach the third plurality of files stored within the third memory portion define a scene capable of being displayed on a graphical interface (col. 3, lines 34-40).

As per claim 14, Silva et al. teach each of the third plurality of files is an instantiated version of its corresponding file from the second subset (derived object 270 is instantiated from the modifier stack 280, col. 12, lines 18-25).

As per claim 15, Silva et al. further teach instantiation of the third plurality of files involves replacing at least some of the information of the second type with alternate information (e.g., changing the parameters of the modifiers, col. 12, lines 35-65).

As per claim 16, as cited above, Silva et al. teach the first memory portion is a graphics library (where all the derived objects are derived from, i.e. the modifier stack), the second memory is an EPGFL (memory portions for modifiers 220-240 in the modifier stack 280), the third memory portion is a scene memory 142, and the second and the third memory are comprised within a fourth memory portion that is a project file (item 145, Fig. 1).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 17-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silva et al. (U.S. Patent No. 6,061,067) in view of Beda et al. (U.S. Patent No. 7,064,766).

Referring to claim 18, as cited above, Silva et al. teach receiving selections of graphical entities to be incorporated in a project (as shown in Fig. 3), and retrieving the first information concerning the selected graphical entities (e.g. a tube, Fig. 3) from a first memory portion (modifier stack 280, Fig. 2), and duplicatively storing the first information in a second memory portion (derived object from master object 210 to be stored in scene memory 142), and retrieving a second information concerning components of the selected graphical entities, and duplicatively storing the second information concerning components of the selected graphical entities in a second memory portion (e.g. world space modifier 240, transform 230, etc. for the derived object

to be stored in the scene memory 142). Silva et al. fails to teach the first information is the high level information, and the second information is the low level information. However, this is what Beda et al. teach as shown in Fig. 3, and col. 9, line 35 to col. 10, line 41.

Therefore, it would have been obvious to one skilled in the art to utilize the method as taught by Beda et al. in combination with the method as taught by Silva et al. in order to conserve resources and reduce the need for subsequent, repeated processing (col. 3, line 1-7).

As per claim 19, which is similar in scope to claims 3 and 8, is thus rejected under the same rationale.

As per claim 20, which is similar in scope to claims 5, 6, and 11, is thus rejected under the same rationale.

As per claim 21, as cited above, with reference again to Fig. 3, Silva et al. teach receiving a command to create one of the components (creating a tube object), providing a template with fields to be completed (shown in 3D modeling and animation interface 135), and calculating the second identification number based on the received information (col. 15, lines 52-55), and (as cited above), Silva et al. and Beda et al. in combination teach storing the lower level information corresponding to the one component in the first memory portion, wherein the lower level information includes the received information and an identification number (Figs. 6-9, col. 23, lines 50-56, Beda et al.).

As per claim 22, as cited above (as applied to claims 5, 6, and 9), Silva et al. teach the received information concerns primitive information, vertice information, face information, native color information, native pivot information, and a name corresponding to the one

component, wherein the received information is stored in a file corresponding to the one component.

As per claim 23, which is similar in scope to claim 21, further requires calculating a first identification number and storing the higher level information. This is also taught by Beda et al. (col. 11, lines 35-42).

As per claim 24, as cited above, Silva et al. teach the received information includes information identifying at least one of the components as corresponding to the graphical entity (by the name of the derived object).

Claim 25, which is similar in scope to claim 22, is thus rejected under the same rationale.

As per claim 26, Silva et al. and Beda et al. in combination teach providing a template with fields to be completed with substitute information intended to replace at least some of the higher-level information corresponding to one of the selected graphical entities; receiving the substitute information to complete the fields (e.g. changing the parameter of the object, Fig. 3, Silva et al.); and recalculating a first identification number associated with the one selected graphical entity based upon the received substitute information (not explicitly stated, but inherently included since a new object created is associated with a new name in the name and color field, Fig. 3); and storing a new graphical entity with new higher-level information including at least the recalculated first identification number and the substitute information in a third memory portion (Beda et al. col. 11, lines 35-42, and Silva et al. storing in the scene memory 142).

As per claim 27, Silva et al. teach displaying the new modified information as shown in Fig. 1.

Claim 28, which is similar in scope to claim 26, is thus rejected under the same rationale.

As per claim 29, as cited above, Silva et al. teach the modified version of the graphical entity is stored in the scene memory.

As per claim 30, Silva et al. teach storing the first information (base object) and second information (modified object) in a project file (a fourth memory). Beda et al. teach sending the all the information (high level and low level information) to a remote destination (Fig. 6, Beda et al.). Therefore, it would have been obvious to one skilled in the art to combine the method as taught by Beda et al. and Silva et al. in order to reduce the amount of data to be communicated (col. 23, lines 56-67).

Claim 17, which is similar in scope to claim 30, is thus rejected under the same rationale.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hau H. Nguyen whose telephone number is: 571-272-7787. The examiner can normally be reached on MON-FRI from 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794.

The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

H. Nguyen

01/05/2007

KEE M. TUNG
SUPERVISORY PATENT EXAMINER